

IN THE CLAIMS

This listing of the claim will replace all prior versions and listings of claim in the present application.

Listing of Claims

1. (currently amended) A processing method for use in the operation of a storage managing server that is connected to a storage device and a storage managing terminal, said processing method comprising the steps of:

receiving, by the storage managing server, a first request, requesting download of a manager program, issued from said storage managing terminal, said manager program to be used by said storage managing terminal for executing processing on the storage managing server, and a second request for executing processing including conducting communication of constructional information, which includes volume information defining characteristics of a plurality of volumes included in said storage device, between said storage device and the storage managing server, said constructional information being used for managing said volumes included in said storage device; and

starting, by the storage managing server, processing, which includes at least sending a request to said storage device requesting constructional information, with respect to said second request, and receiving the constructional information transmitted from said storage device in response to the request, before the storage managing server transmits a response to said first request to said storage managing terminal,

wherein the storage managing server, before transmitting a response to said first request including downloading the manager program to said storage managing terminal, transmits the constructional information transmitted from said storage device to the storage managing terminal.

wherein the storage managing terminal, before downloading the manager program from the storage managing server, but after receiving the constructional information from the storage managing server, starts processing which includes displaying a constructional information display operation screen on a display device including the received constructional information, and

wherein said storage device includes said volumes each of which stores data sent from host computers via a network.

2. (previously presented) The processing method according to claim 1, wherein said first request includes a login request from said storage managing terminal to the storage managing server.

3. (currently amended) A storage managing server connected to a storage device and a storage managing terminal,

wherein the storage managing server performs first processing which is executed in response to a first request requesting download of a manager program from said storage managing terminal requesting download of a manager program which is used by said storage managing terminal to execute processing on said storage managing server, and second processing which is executed in response to a second request from said storage

managing terminal, and includes conducting communication of constructional information, which includes volume information defining characteristics of a plurality of volumes included in said storage device, between said storage device and the storage managing server, said constructional information being used for managing said volumes included in said storage device;

wherein the storage managing server starts said second processing, which includes at least sending a request to said storage storage device requesting constructional information, with respect to said second request, and receiving the constructional information transmitted from said storage device in response to the request, before a response to said first request is sent to said storage managing terminal;

wherein the storage managing server, before transmitting a response to said first request including downloading the manager program to said storage managing terminal, transmits the constructional information transmitted from said storage device to the storage managing terminal;

wherein the storage managing terminal, before downloading the manager program from the storage managing server, but after receiving the constructional information from the storage managing server, starts processing which includes displaying a constructional information display operation screen on a display device including the received constructional information; and

wherein said storage device includes said volumes each of which stores data sent from host computers via a network.

4. (previously presented) The storage managing server according to claim 3, wherein said first processing includes the downloading of said manager program for operating the constructional information of said storage device.

5. (currently amended) A processing method for use in the operation of a storage managing terminal that is connected to a storage managing server which is connected to a storage device, said processing method comprising the steps of:

responding to a first request, requesting download of a manager program which is used by said storage managing terminal for executing processing on said storage managing server with respect to said storage device; and

responding to a second request for executing processing, including conducting communication of constructional information, which includes volume information defining characteristics of a plurality of volumes included in said storage device, between said storage device and said storage managing server, said constructional information being used for managing said volumes included in said storage device,

wherein said responding to said first request and responding to said second request are made such that processing of said second request, which includes at least sending a request to said storage device requesting constructional information and receiving the constructional information transmitted from said storage device in response to the request, is performed

before a response to said first request from said storage managing server is sent,

wherein before responding to said first request including
downloading the manager program to said storage managing terminal,
transmitting the constructional information transmitted from said storage
device to the storage managing terminal,

wherein before downloading the manager program from the storage
managing server, but after receiving the constructional information from the
storage managing server, starting processing which includes displaying a
constructional information display operation screen on a display device
including the received constructional information, and

wherein said storage device includes said volumes each of which stores data sent from host computers via a network.

6. (previously presented) The processing method according to claim 5, wherein said first request includes a login request.

7. (currently amended) A storage managing terminal connected to a storage managing server which is connected to a storage device, wherein the storage managing terminal performs transmission processing for sending a first request, requesting download of a manager program, to said storage managing server, said manager program to be used by said storage managing terminal to execute processing on said storage managing server, and a second request for executing processing which is executed in response to the second request to said storage managing server,

said processing executed in response to the second request includes conducting communication of constructional information, which includes volume information defining characteristics of a plurality of volumes included in said storage device, between said storage device and said storage managing server, said constructional information being used for managing said volumes included in said storage device;

wherein processing said second request, which includes at least sending a request to said storage device requesting constructional information and receiving the constructional information transmitted from said storage device in response to the request, is performed before the response to said first request from said storage managing server is sent;

wherein the storage managing server, before transmitting a response to said first request including downloading the manager program to said storage managing terminal, transmits the constructional information transmitted from said storage device to the storage managing terminal;

wherein the storage managing terminal, before downloading the manager program from the storage managing server, but after receiving the constructional information from the storage managing server, starts processing which includes displaying a constructional information display operation screen on a display device including the received constructional information; and

wherein said storage device includes said volumes each of which stores data sent from host computers via a network.

8. (previously presented) The storage managing terminal according to claim 7, wherein said first request includes a login request.

9. (currently amended) A processing method of a storage managing system constructed by a storage managing server connected to a storage device, and a storage managing terminal connected to the storage managing server, said processing method comprising the steps of:

issuing, by said storage managing terminal, a first request, requesting download of a manager program, which is used by said storage managing terminal for executing processing on the storage managing server and a second request for executing processing including conducting communication of constructional information, which includes volume information defining characteristics of a plurality of volumes included in said storage device, between said storage device, and said storage managing server, said constructional information being used for managing said volumes included in said storage device, to said storage managing server; and

upon said storage managing server receiving the first and second requests, starting, by said storage managing server, processing with respect to said second request, which includes at least sending a request to said storage device requesting constructional information and receiving the constructional information transmitted from said storage device in response to the request, before a response to said first request is transmitted to said storage managing terminal,

wherein the storage managing server, before transmitting a response to said first request including downloading the manager program to said

storage managing terminal, transmits the constructional information transmitted from said storage device to the storage managing terminal, wherein the storage managing terminal, before downloading the manager program from the storage managing server, but after receiving the constructional information from the storage managing server, starts processing which includes displaying a constructional information display operation screen on a display device including the received constructional information, and

wherein said storage device includes said volumes each of which stores data sent from host computers via a network.

10. (previously presented) The processing method of the storage managing system according to claim 9, wherein said first request includes a login request.

11. (currently amended) A storage managing system constructed by a storage managing server connected to a storage device, and a storage managing terminal connected to the storage managing server, wherein said storage managing terminal performs transmission processing for sending a first request, requesting download of a manager program to said storage managing server, said manager program to be used by said storage managing terminal to execute processing on said storage managing server, and a second request for executing processing including conducting communication of constructional information which includes volume information defining characteristics of a plurality of volumes included

in said storage device by said storage managing server between said storage device and said storage managing server, said constructional information being used for managing said volumes included in said storage device;

wherein said storage managing server performs first processing executed in response to the first request from said storage managing terminal, and second processing which is executed in response to the second request from said storage managing terminal, and includes conducting communication of the constructional information of said storage device between said storage device and the storage managing server,

wherein said second processing with respect to the second request from said storage managing terminal, including at least sending a request to said storage device requesting constructional information and receiving the constructional information transmitted from said storage device in response to the request, is started before said storage managing server sends a response to said first request to said storage managing terminal,

wherein the storage managing server, before transmitting a response to said first request including downloading the manager program to said storage managing terminal, transmits the constructional information transmitted from said storage device to the storage managing terminal,

wherein the storage managing terminal, before downloading the manager program from the storage managing server, but after receiving the constructional information from the storage managing server, starts processing which includes displaying a constructional information display operation screen on a display device including the received constructional information, and

wherein said storage device includes said volumes each of which stores data sent from host computers via a network.

12. (previously presented) The storage managing system according to claim 11, wherein said first request includes a login request, and said first processing includes the downloading of said manager program for operating the constructional information of said storage device.

13. (currently amended) A processing method executed by a storage managing server in a storage managing system, the storage managing system including:

plural volumes each being where data sent from a host computer via a network is stored;

a storage managing device having constructional information which includes volume information defining characteristics of the volumes;

a storage managing terminal; and

the storage managing server connected to the storage device and the storage managing terminal, the method comprising the steps of:

a first step of receiving, from the storage managing terminal, a first request for downloading a manager program used by the storage managing terminal to the storage managing terminal;

a second step of receiving, from the storage managing terminal, a second request for transmitting, to the storage managing terminal, the constructional information required for conducting the processing the storage managing terminal performs regarding the constructional information, and

sending a request to the storage managing device requesting the constructional information and receiving the constructional information from the storage managing device before sending a response to said first request;

a third step of downloading the manager program to the storage managing terminal; a fourth step of acquiring, from the storage device, transmitting the constructional information relevant to the second request while the manager program is being downloaded to the storage managing terminal to the storage managing terminal; and

a fifth fourth step of displaying, in the storage managing terminal, a constructional information display operation screen on a display device including the received constructional information transmitting the acquired constructional information to the storage managing terminal; and

a fifth step of downloading the manager program to the storage managing terminal after said third and fourth steps.

14. (currently amended) A processing method executed by a storage managing server in a storage managing system, the storage managing system including:

plural volumes each being where data sent from a host computer via a network is stored;

a storage device having constructional information which includes volume information defining characteristics of the volumes;

a storage managing terminal; and

the storage managing server connected to the storage device and the storage managing terminal, the method comprising the steps of:

a first step of receiving, from the storage managing terminal, a first request, requesting download of a manager program used by the storage managing terminal to the storage managing terminal;

a second step of receiving, from the storage managing terminal, a second request for transmitting, to the storage managing terminal, the constructional information required for conducting the processing the storage managing terminal performs regarding the constructional information, and sending a request to the storage managing device requesting the constructional information and receiving the constructional information from the storage managing device before sending a response to said first request;

~~a third step of downloading the manager program to the storage managing terminal; and~~

~~a fourth step of acquiring the constructional information relevant to the second request from the storage device, and transmitting the acquired constructional information to the storage managing terminal;~~

a fourth step of displaying, in the storage managing terminal, a constructional information display operation screen on a display device including the received constructional information; and

a fifth step of downloading the manager program to the storage managing terminal after said third and fourth steps.